NATIONAL SCIENCE FOUNDATION



ANNOUNCEMENT NUMBER S20010225 DIRECTOR, DIVISION OF DESIGN, MANUFACTURE AND INDUSTRIAL INNOVATION DIRECTORATE FOR ENGINEERING

Arlington, Virginia 22230

NSF's Directorate for Engineering (ENG) is seeking qualified candidates for the position of Director, Division of Design, Manufacture and Industrial Innovation (DMII). The Division Director serves as a member of the ENG Directorate leadership team and as the Foundation's spokesperson in the areas supported by the Division. DMII supports academic research and education activities that spur innovation and enhanced productivity in a broad range of U.S. industries. These activities also support the development of a well-educated and diverse human resource base that is vital to U.S. global competitiveness. DMII supports fundamental academic research in design, manufacturing, and industrial engineering as well as well as crosscutting industrial innovation programs that encompass major components of NSF. DMII identifies the underlying design and manufacturing theories for the innovation of new products, processes and systems in a wide variety of manufacturing and service enterprises. Discoveries and major advances in understanding engineering design, operations research, manufacturing and service, enterprise systems, materials processing, and manufacturing machines and equipment form the core of DMII activity. In FY 2002, DMII envisions an aggressive expansion into the following areas: nanomanufacturing, environmentally benign manufacturing and service enterprise engineering. The Division has a FY 2001 budget of \$125 million and a staff of 25 – 30 employees. Additional information about DMII programs and initiatives is provided on the NSF website at http://www.eng.nsf.gov/dmii.

Employment may be on a temporary Senior Executive Service appointment basis in the Federal Government, by temporary assignment under provisions of the Intergovernmental Personnel Act (IPA), by reimbursable detail from another Federal agency, or by other temporary mechanism. The qualification requirements are included on the reverse side of this announcement, which is also located on NSF's website at http://www.nsf.gov/home/menus/jobs.htm. Information about assignment options is provided below.

- <u>IPA Assignment</u> Individuals eligible for an IPA assignment with a Federal agency include employees of State and local government agencies or institutions of higher education, Indian tribal governments, and other eligible organizations in instances where such assignments would be of mutual benefit to the organizations involved. Initial assignments under IPA provisions may be made for a period up to two years, with a possible extension for up to an additional two-year period. The individual remains an employee of the home institution and NSF provides funding toward the assignee's salary and benefits.
- <u>Senior Executive Service (SES) Limited Term Appointment</u> Individuals may receive a temporary Federal Senior Executive Service appointment within the ES-1 to ES-4 range (currently \$120,261 to \$133,700). SES limited term appointments have a three-year maximum limit.
- Reimbursable Interagency Detail Federal employees may be temporarily detailed from one agency to another under an interagency agreement. Under such an agreement, the individual would retain current employment status at the home agency and NSF would provide funding toward the detailee's salary and benefits.
- Reassignment of Current SES Member Current career SES members may apply for reassignment or transfer, with the understanding that appointment in the Division Director role will be on a temporary basis.

Qualification requirements are included on the reverse side of this announcement. Those interested should submit a curriculum vitae or Federal application form and a statement (letter or narrative format) addressing the executive/managerial and professional/technical qualifications and indicating preferred assignment option. Applicants are also asked to complete and submit the attached NSF Form 1232, "Applicant Survey." Submission of this form is voluntary and will not affect your application for employment. The information provided will be used only for statistical purposes. Applications may be transmitted electronically to execsrch@nsf.gov or mailed or delivered to the address listed below. The formal consideration process will begin in early September.

National Science Foundation ATTN: S20010225 Executive Personnel and Development Branch Division of Human Resource Management 4201 Wilson Boulevard, Room 315 Arlington, Virginia 22230

Kathy Tolson, the point of contact regarding applications, may be reached at 703 292-8755; hearing impaired individuals should call TDD on 703-292-8044.

DIRECTOR, DIVISION OF DESIGN, MANUFACTURE AND INDUSTRIAL INNOVATION (DMII) DIRECTORATE FOR ENGINEERING (ENG)

STATEMENT OF DUTIES: The Division Director provides leadership and direction to the NSF Division that funds fundamental academic research and education in Engineering Decision Systems and Manufacturing Processes and Equipment. DMII manages Industrial Innovation Programs, which include the Foundation-wide Small Business innovation Research and Small Business Technology Transfer programs.

DMII supports activities to promote industry-university linkages and innovation, including the Innovation and Organizational Change Program and the Grant Opportunities for Academic Liaison with Industry program. The incumbent assesses needs and trends in the areas supported by the DMII Division, implements overall strategic planning and policy setting, justifies budget estimates, balances program needs, identifies and allocates resources, oversees the timely evaluation of proposals and recommendations for awards and declinations, and fosters partnerships with other Divisions, Directorates, Federal agencies, the industrial sector, scientific organizations and the academic community.

QUALIFICATIONS REQUIREMENTS

Essential

EXECUTIVE/MANAGERIAL

- 1. Demonstrated ability to develop and implement an organizational vision that integrates key national science/engineering, technology, and education goals. Includes understanding of the relative roles and relationships of Federal, industrial and academic organizations involved in the support of engineering research and education. Includes the ability to formulate effective program strategies consistent with the overall goals of the organization. (Leading Change)
- 2. Demonstrated ability to achieve organizational objectives by creatively managing and motivating staff. Includes the ability to promote quality through the effective use of performance standards and assessment. Includes leveraging diversity, promoting developmental opportunities, fostering commitment and team spirit, and constructively resolving conflicts. (Leading People)
- 3. Demonstrated knowledge and ability in planning, prioritizing, and coordinating large, complex programs in engineering. Includes the ability to make timely and effective decisions and to produce results though strategic planning, and the implementation and evaluation of programs and policies. Includes the ability to change and balance complex and diverse program demands within available resources in response to major changing needs in engineering research and education. (Results-Driven)
- 4. Demonstrated ability to utilize human, financial, material, and information resources in a manner that instills public trust and accomplishes the organization's mission and to take advantage of new technologies to enhance the effectiveness of decision making. Includes demonstrated ability in recruiting and selecting staff, allocating financial resources, and managing budgetary processes. (Business Acumen)
- 5. Demonstrated ability to serve as the senior spokesperson for a major organization involved in engineering research and education and to build coalitions. Includes the ability to represent and coordinate organizational strategy and initiatives with representatives of the academic and industrial communities, including academic and industrial researchers and those responsible for the administration of research and educational institutions; representatives of the industrial and small business communities, Federal and State officials; representatives of professional organizations and the public. (Building Coalitions/Communication)

Desirable

1. Demonstrated ability to achieve organizational goals through effective and innovative management approaches emphasizing interdisciplinary coordination and teamwork.

PROFESSIONAL/TECHNICAL

Essential

- 1. Ph.D. or equivalent professional experience or a combination of education and equivalent experience in chemical or material or industrial engineering or other science based engineering areas (such as design, enterprise systems, computer-integrated manufacturing, manufacturing process and equipment systems) or an area of physical science within the purview of the Division.
- 2. Substantial contributions to the engineering research areas requiring a science base (see 1. Above) through research or research administration.
- 3. Demonstrated familiarity with the public policy and engineering research communities.
- 4. Demonstrated ability to relate different fields of engineering and science to research problems critical to technological advancement and demonstrated understanding of the processes involved in technology transfer and innovation.
- 5. Demonstrated knowledge of and experience in the small business science and technology research community.

Desirable

- 1. Demonstrated broad knowledge of diverse fields of engineering research, such as nanoscale science and engineering, information technology, etc.
- 2. Demonstrated knowledge of academic research community and recognized professional standing in the engineering community as evidenced by publications and/or professional leadership and awards.
- 3. Demonstrated knowledge and ability in grant and contract administration, fiscal management, and budget preparation with experience in engineering research support.

NATIONAL SCIENCE FOUNDATION APPLICANT SURVEY

OMB No. 3145-0096

Expiration: August 2002

Vacancy Ann. #:	Position Status (temporary/permanent):
Position Title/Series/Grade:	
application. The data collected will be used only law. Pursuant to 5 CFR 1320.5(b), an agency mait displays a valid OMB control number. The OM about 3 minutes to complete this survey, including	INSTRUCTIONS d. Submission of this Information is voluntary and it will have no effect on the processing of your for statistical purposes to ensure that agency personnel practices meet the requirements of Federal ay not conduct or sponsor, and a person is not required to respond to an information collection unless IB control number for this collection is 3145-0096. NSF estimates that each respondent should take g time to read the instructions. You may have comments regarding this burden estimate or any other or reducing this burden. If so, please send them to NSF Reports Clearance Officer, Division of Arlington, VA. 22230.
records and forms that solicit personal information	
AUTHORITY - Section 7201 of title 5 of the U.S. C	Code and Section 2000e-16 of title 42 of the U.S. Code.
PURPOSE AND ROUTINE USES The information is used for research and for a Federal Equal Opportunity Recruitment Program (FEORP) to help insure that agency personnel practices meet the requirements of Federal law. Address questions concerning this form and its uses to the Privacy Act Officer, National Science Foundation, VA 22230.	
 01 - Newspaper (specify) 02 - Contact with NSF Personnel Office (Agency Bulletin Board or other Announcerr) 03 - NSF-initiated personal contact 04 - Science Magazine, or other professional jou (specify) 05 - Affirmative Action Register 06 - Attendance at conference, meeting or job far (specify) 07 - NSF recruitment at school or college 08 - Colleague referral 09 - NSF Bulletin 4. Please select the racial/ethnic category with ward A. American Indian or Alaskan Native identification through tribal affiliation or B. Asian or Pacific Islander. A person or the Pacific Islands. This area included C. Black, not of Hispanic origin. A person of Mexican, Puerto Rican, Cuban, Centra D. Hispanic. A person of Mexican, Puerto E. White, not of Hispanic origin. A person of include persons of Mexican, F. 5. Sex (Circle the appropriate letter.) F - Female Mexican provide Information on your disability so 1. I do not have a disability; 2. Hearing impairment 	12 - State employment office 13 - School or college counselor or other official 14 - Private job Information service 15 - Private employment service 16 - Friend or relative working at NSF 17 - Friend or relative not working at NSF 18 - NSF website 19 - Internet or other website 20 - Other (specify) Which you most closely identify yourself. (Circle the appropriate letter) . A person having origins in any of the original peoples of North America, who maintains cultural community recognition. having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, is, for example, China, India, Korea, the Philippine Islands, and Samoa. son having origins in any of the Black racial groups of Africa. This does not include persons of I or South American, or other Spanish cultures or origins. To Rican, Cuban, Central or South . American or other Spanish culture or origin, regardless of race. erson having origins in any of the original peoples of Europe, North Africa or the Middle East. This Puerto Rican, Cuban, Central or South American, or other Spanish cultures or origin. M - Male
listed.	
FOR AGENCY USE	
Agency Code:	

AN EQUAL EMPLOYMENT OPPORTUNITY EMPLOYER